

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of:	)	
	)	
Mireille MAUBRU et al.	)	Group Art Unit: 1619
	)	
Application No.: 10/796,082	)	Examiner: Jyothsna A. VENKAT
	)	
Filed: March 10, 2004	)	
	)	
For: COSMETIC COMPOSITIONS	)	Confirmation No.: 2687
COMPRISING AT LEAST ONE	)	
CROSSLINKED COPOLYMER, AT	)	
LEAST ONE INSOLUBLE	)	
MINERAL PARTICLE AND AT	)	
LEAST ONE POLYMER, AND	)	
USES THEREOF	)	

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

**DECLARATION UNDER 37 C.F.R. § 1.132**

I, **Samira Khenniche**, do hereby make the following declaration:

1. I am a **French CITIZENSHIP**, residing at **40 rue Chance Milly at Clichy (92110) Paris**
2. I have been awarded a degree in **chemistry** from **Lyon university**, and am a Doctor in **chemistry**.
3. I have been employed by L'ORÉAL since **September 2006** and I am presently a research engineer of the **Applied Research** at L'ORÉAL.

4. Given my education and experience, particularly in the area of hair care, I consider myself able to provide the following testimony based on experiments conducted by me or under my direct supervision.

**I. TESTING**

5. Comparative testing was performed between comparative Composition A and inventive Compositions B and C in order to demonstrate the resulting differences in softness, smoothness, suppleness in both wet and dry hair as well as texture in dry hair between the compositions.

6. Composition A (comparative) and Compositions B and C (inventive) were prepared according to Table 1 below. The compositions were identical except that Composition A (comparative) contains mica-TiO<sub>2</sub> as a water-insoluble solid mineral particle while Composition B (inventive) contains calcium carbonate and Composition C (inventive) contains clay.

**TABLE 1**

	<b>Ingredient</b>	<b>COMPARATIVE Composition A</b>	<b>INVENTIVE Composition B</b>	<b>INVENTIVE Composition C</b>
<b>Part A</b>	Deionized water	14.45	14.45	14.45
	Acrylates Crosspolymer (30%) AQUA SF1 from NOVEON	5	5	5
	Cocoyl Isethionate (and) Sodium Lauroamphoacetate (and) Sodium Methyl Cocoyl taurate (and) Sodium Xylene Sulfonate (38%)	45	45	45
	Sodium Laureth Sulfate (2 mole, 27%)	15	15	15
<b>Part</b>	Deionized water	5	5	5

B	Sodium Hydroxyde (18%)	0.05	0.05	0.05
	Guar Hydroxypropyl Trimonium Chloride	0.15	0.15	0.15
	Citric acid (50%)	0.05	0.05	0.05
Part C	Sodium Cocoamphoacetate (37%)	5	5	5
	Polyquaternium-7	2	2	2
	Dimethiconol (and) TEA-Dodecylbenzenesulfonate	4	4	4
Part D	Deionized water	2.5	2.5	2.5
	<b>mica-TiO2</b>	<b>0.2</b>		
	<b>CaCO3</b>		<b>0.2</b>	
	<b>Clay</b>			<b>0.2</b>
Part E	Fragrance	0.5	0.5	0.5
	Phenoxyethanol (and) Methylparaben (and) Butylparaben (and) Ethylparaben (and) Propylparaben	0.5	0.5	0.5
	Citric acid (50%)	0.6	0.6	0.6

7. At the time of use, Compositions A-C were each mixed in separate bowls. Then, one gram of each Composition was applied to its own 2.7 gram, wet, sensitized hair lock. The locks were rolled and kneaded by hand and then rinsed with water. After evaluation of the wet hair, the locks were dried and evaluated again.

## II. SENSORY EVALUATION

8. Seven experts evaluated the cosmetic properties of the hair of the locks. The wet hair was evaluated for softness, smoothness, and suppleness. After the locks were dried, the hair was evaluated for softness, smoothness, suppleness, and texture. The results were ranked from 0-5 with zero representing "not good" and five

representing "excellent." Tables 2 and 3 show the results of the evaluations. The statistical significance was analyzed using a Dunnett test.

**TABLE 2**

	COMPARATIVE Composition A	INVENTIVE Composition B	p-value
<b>Wet Hair</b>			
<b>Softness</b>	2.14	3.35	0.025 (difference significant to threshold < 10%)
<b>Smoothness (feel)</b>	2.21	3.28	0.087 (difference significant to threshold < 10%)
<b>Suppleness</b>	2.78	2.42	> 0.1
<b>Dried Hair</b>			
<b>Softness</b>	2.57	3.5	0.034 (difference significant to threshold < 10%)
<b>Smoothness (touch)</b>	2.5	3.42	0.073 (difference significant to threshold < 10%)
<b>Suppleness</b>	2.35	2.92	0.243 (difference
<b>Texture</b>	2.07	2.78	0.059 (difference significant to threshold < 10%)

**TABLE 3**

	COMPARATIVE Composition A	INVENTIVE Composition C	p-value
<b>Wet Hair</b>			
<b>Softness</b>	2.14	2.57	0.53
<b>Smoothness (feel)</b>	2.21	2.85	0.36
<b>Suppleness</b>	2.78	2.28	>0.1
<b>Dried Hair</b>			

<b>Softness</b>	2.57	<b>3.35</b>	0.075 (difference significant to threshold < 10%)
<b>Smoothness (touch)</b>	2.5	<b>3.28</b>	0.137
<b>Suppleness</b>	2.35	<b>2.92</b>	0.243
<b>Texture</b>	2.07	<b>2.85</b>	0.037 (difference significant to threshold < 10%)

### III. CONCLUSION

9. From the above results, it is clear that there is a marked improvement of the cosmetic properties in the hair treated with inventive Composition B and inventive Composition C.

10. Based on my education and experience, one of ordinary skill in the art would not have expected that a composition containing calcium carbonate or clay, according to the present claims, would result in the marked improvement of the cosmetic properties.

11. I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Dated: March 16<sup>th</sup> 2009

By: Khenniche Samira

KHENNICHE